MULTIMEDIA UNIVERSITY ®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015 / 2016

PCA0075 – COMPUTER APPLICATIONS AND WEB DESIGN

(Foundation in Management, Foundation in English)

9 MARCH 2016
9.00 a.m. - 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **THREE pages** excluding the cover page.
2. Attempt **FIVE** out of **SIX** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Write your answers in the Answer Booklet.

QUESTION 1 [10 Marks]

As a university student, you are required to purchase a computer for the execution of your class projects and assignments using computer applications such as Microsoft Office and some simple graphic software.

a. There are different categories of computer users, ranging from home user, small office user, mobile user, power user to enterprise user.
   i. Identify the category of computer user that you belong to, and provide a reason. (2 marks)

   ii. Explain who power users are. (1 mark)

b. Identify two key components in the system unit that you need to consider before buying a computer.
(2 marks)

c. After using this computer for two years, you discover that the computer is not able to boot up quickly and is running slow for most of the applications. Explain the step how you tackle this problem without buying a new PC.
(2 marks)

d. Every time you turn on the system unit, you can hear some noises and feel the hot air emitted from the system unit. Identify the reasons for this noise, and provide two measures to refrain your computer system from overheating.
(3 marks)

QUESTION 2 [10 Marks]

a. Flash memory is an electronic computer storage medium that do not consist any internal moving parts and it can be electrically erased and reprogrammed. Thumb/Flash drives and Solid State Drives are two examples of flash memory storage. Discuss the differences.
(6 marks)

b. Michael started a new job as a salesperson in the printing department of a new technology reseller for industrial customers.

   i. What should Michael recommend for a customer who is looking for a printer that can print billboards? Why?
(2 marks)

   ii. A customer is looking to be able to print drawings and maps. What kind of printer should Michael recommend for her? Why?
(2 marks)

Continued...

QUESTION 3 [10 Marks]

a. Lim has been using his laptop for almost a year now and he notices that it takes a longer time to open files saved in the hard disk. He knows that this is because every day he is constantly saving, copying, opening, deleting and moving files in the hard disk. What has happened to his hard disk? What kind of utility program he needs to run? Explain.

(4 marks)

b. Anita is a home user and she just bought a new laptop. She has a list of different types of software she can install. Since Anita is a computers beginner, she seeks your opinion on this so that she can decide which software she would like to install. Describe to her the functions of the following software and give your recommendation whether you would advise her to install the software or not. Explain.

i. Spreadsheet
ii. Personal finance
iv. Database
v. Multimedia authoring tools

(6 marks)

QUESTION 4 [10 Marks]

a. A network topology refers to the layout of the computers and devices in a communications network. Three commonly used network topologies are star, bus and ring. Give **TWO (2)** characteristics of each network topology.

(6 marks)

b. The following communication devices are used to transmit data, instructions and information between a sending device and a receiving device. Briefly explain each communications device below.

i. Wireless access points
ii. Routers
iii. Network cards
iv. Wireless modems

(4 marks)

QUESTION 5 [10 Marks]

a. Almost all applications use the file processing approach, the database approach, or a combination of both approaches to store and manage data. Given a choice, would you choose a file processing environment over a database? Why or Why not? Give **THREE (3)** reasons.

(4 marks)

Continued...

b. A database backup is a copy of the database. A database is usually backed up on a regular basis.
   i. Why is it important to back up a database?
   ii. Why backups are performed?

(3 marks)

c. Databases often perform validity checks that analyses data as users enter to help ensure it is correct.
   i. Why are validity checks important?
   ii. List **TWO (2)** examples of validation rules.

(3 marks)

QUESTION 6 [10 Marks]

a. What is a malware? Can multimedia files be infected with a malware?

(3 marks)

b. Discuss **TWO (2)** examples of malware that are designed to damage a computer system?

(4 marks)

c. What are the tips for preventing viruses and other malware from attacking your computer?

(3 marks)

End of Paper